

IT'S TIME YOU SWITCHED TO di-tech's PACE 1000 COMPUTERIZED REAL-TIME WEEKLY EVENT CONTROLLER!

It's the ultimate sophistication that anyone can use and everyone can afford! Automatically execute up to 935 or more switching events every seven-day period.



INTEL SBC 655



The expandable **di-tech Pace 1000** is a real-time computer event controller that automatically executes up to 935 events in a 7 day period. It employs solid-state memory: 30k is in EPROM and 34k is in RAM.

The video terminal and keyboard are designed for simple English communication with the computer.

The Pace 1000 features these 7 particular function modes:

1. **HELP** mode displays a list of the modes and their mode keys and a list of commands.
2. **REALTIME EVENT MONITOR** mode displays the most current events (those that were most recently executed and those that are about to be executed), and any current display messages.
3. **EDIT** mode permits you to create, select and edit, or select and delete events in the database. You can also select and immediately execute an event in the database. The repeat day feature is also performed in this mode.
4. **HOLD** mode permits you to select and release a HOLD event, either with or without execution.
5. **MANUAL OPERATION** mode permits you to enter a special list of events for manual execution and to execute those events.
6. **SET** mode permits you to set the Auto Control on or off, set the Message Display on or off, re-sequence the event item numbers for the entire database or set the system clock or the calendar date.
7. **DEFINE** mode permits you to define or delete names of sources, destinations, units or functions or to define or delete Display Messages.

With the proper interface you can also control audio and/or video switchers, IF processors, any on-off function, even your light switches!

It's everything you want in an affordable weekly event controller!

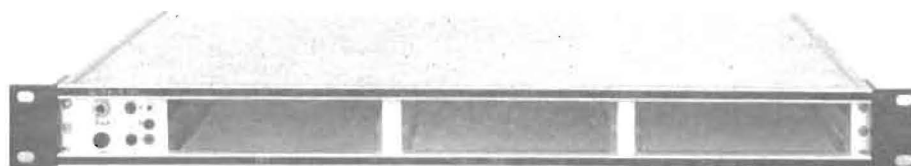
di-tech

discover for yourself why industry leaders are switching to **di-tech!**

311 WYANDANCH AVENUE
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Technical Problems
Bob Johnson 516-667-6300
Joe Perullo

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MODEL 101

The **MODEL 101** frame has been designed to mount into a standard 19 inch E.I.A. rack frame assembly. The 101 configuration allows for mounting up to 3 di-tech modules and its built-in power supply.

ELECTRICAL

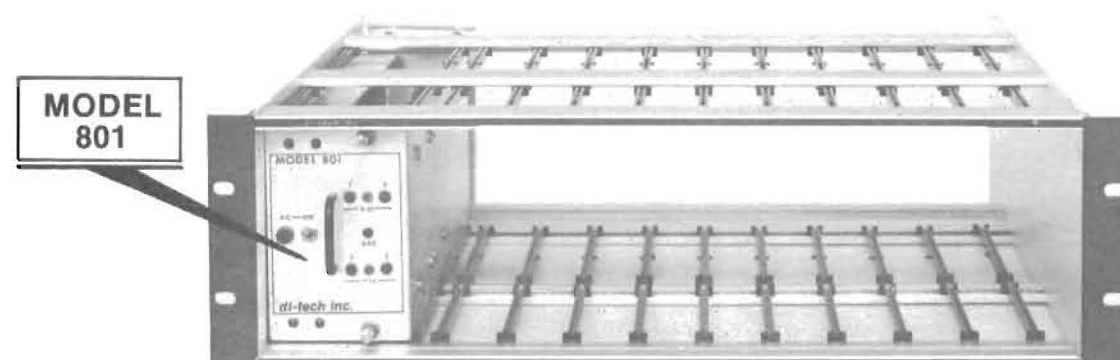
A.C. input	115/230 volts, $\pm 10\%$
D.C. output	+15 volts @ .6 amps. -15 volts @ .6 amps.

ENVIRONMENTAL

Temperature	-20 to +60 degrees C.
Humidity	0 to 95%

DIMENSIONS 1.75"H. (44.5mm), 19"W. (483mm), 16.25"D. (413mm)

WEIGHT 6 lbs. (2.7kg)



**MODEL
801**

MODEL 103

The **MODEL 103** frame has been designed to mount into a standard 19 inch E.I.A. rack frame assembly. A hinge down front panel is supplied to protect and to allow convenient access to the modules. The Model 801 power supply slides into the frame assembly and up to 10 di-tech modules can be accommodated.

DIMENSIONS 5.25"H. (133mm), 19"Wm (483mm), 16.25"D. (413mm)

WEIGHT 6 lbs (2.7kg)

The **MODEL 801** power supply has been designed to easily handle the current requirements from the di-tech modules under specified voltage variations and temperature environments. A special feature of the power supply is the redundant D.C. circuitry which permits the unit to continually provide the specified voltages in the event of a problem. In addition, the appropriate LED will be extinguished and a contact closure will occur for the external alarm output.

ELECTRICAL

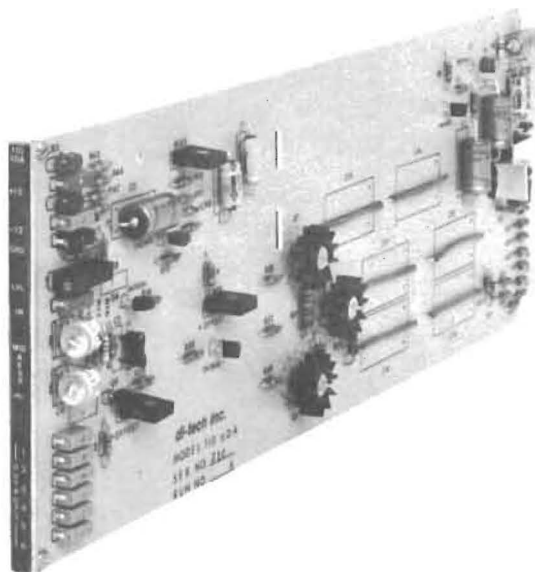
A.C. input	115/230 volts, $\pm 10\%$
D.C. output	+15 volts @ 2 amps. -15 volts @ 2 amps.

ENVIRONMENTAL

Temperature	-20 to +60 degrees
Humidity	0 to 95%

DIMENSIONS 4.5"H. (114mm), 3"W. (76mm), 13"D. (330mm)

WEIGHT 7 lbs. (3.2kg)



MODEL 110

KEY FEATURES

- D.C. OUTPUT COUPLING
- REGULATORS ON EVERY D.A.
- 6 OUTPUTS
- 9 dB GAIN
- 20MHz BANDWIDTH
- MOUNTING VERSITILITY

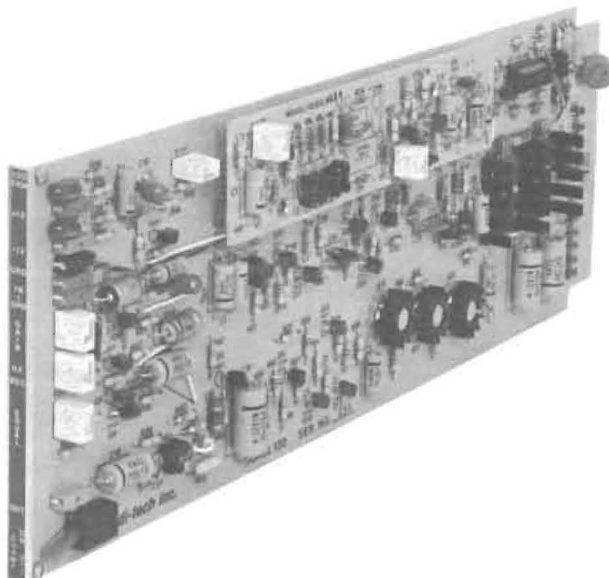
DESCRIPTION

The Model 110 video distribution amplifier emphasises the use of tightly controlled standard component parts that are properly derated for ultra stable performance.

The standard D.C. coupled outputs provide the user with a unit that has minimum tilt and bounce. Each video distribution amplifier has its own regulator, thereby limiting a failure to one unit should a problem occur with the D.C. circuitry. The LED indicators for plus and minus voltages, allow for a convenient and rapid visual indication of normal

operation. The 20 MHz bandwidth, permits distribution of digital data and other wideband information.

The Model 110 video distribution amplifier can be mounted in a vertical or horizontal configuration. For horizontal mounting, the Model 101 frame is used. This frame has a capacity for mounting up to 3 video D.A.'s and, comes complete with its own built in power supply. When the video D.A.'s are mounted vertically, the frame Model 103 is used. The 103 frame requires a Model 801 power supply and, the capacity is up to 10 video D.A.'s.



MODEL 120

KEY FEATURES

- DIFFERENTIAL INPUT
- COMMON MODE REJECTION, -55 dB
- BACK PORCH CLAMPER, FAST OR SLOW
- OPTIONAL 10 dB SLOPE EQUALIZER
- 6 OUTPUTS
- 12 dB GAIN

DESCRIPTION

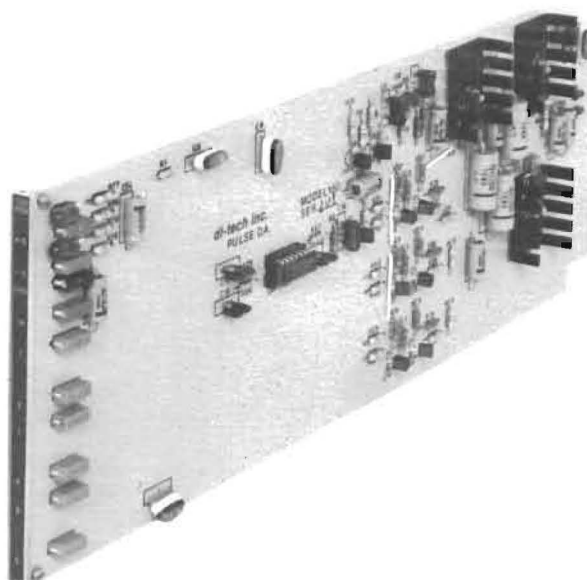
The Model 120 is a 1-input, 6-output video distribution amplifier which features differential input, a switchable back porch clamper and an optional 10 dB cable slope equalizer.

On cable runs where common mode hum exists, the differential input minimizes this problem by at least 55 dB. The switchable clamper circuit will further reject hum by 30 dB and in addition the field tilt is reduced to within 0.1%. The clamping speed (fast or slow) can be altered quite simply by a plug-in strap located on the P.C. card.

The optional 10 dB 6 section cable equalizer is

continuously variable and easy to use. Only one adjustment is required and it is located on the front edge of the card. With the *DI-TECH* equalizer you do not require separate fixed equalizers for various lengths of cable. In addition an extender card is not required for making equalizer adjustments. The equalizer is a plug-in card which can be added in the field without the need for soldering.

The Model 120 is designed for mounting in the Model 101 frame which accepts up to 3 modules or the Model 103 frame which accommodates up to 10 modules.



MODEL 150

FEATURES

- 6 OUTPUTS
- I.C. CIRCUITRY
- INPUT HUM UP TO 4.0 Vp-p, NO OUTPUT JITTER
- CONSTANT OUTPUT
- MAXIMUM STABILITY
- TEST POINTS, INPUT AND OUTPUT

DESCRIPTION

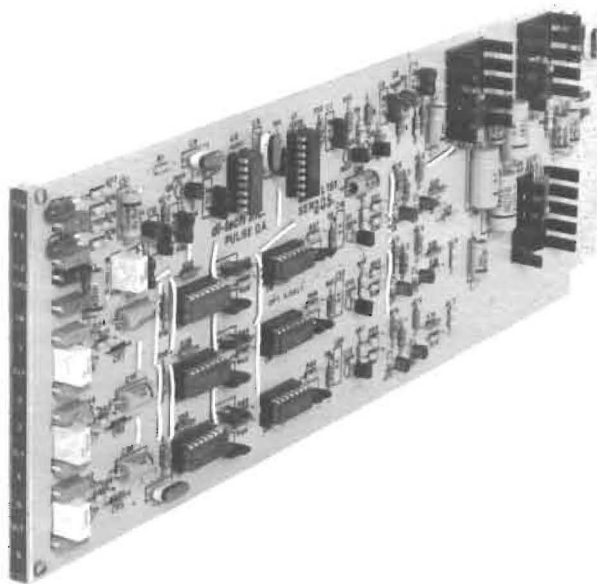
The di-tech **MODEL 150** pulse Distribution Amplifier is a precise device which utilizes the incoming pulse for time reference only and regenerates a pulse that is virtually free from distortion.

The input will accept up to 4.0 Vp-p hum with no jitter appearing on the 6 outputs. With input levels from 2 to 8 Vp-p, the output will remain constant at

4.0 Vp-p and the output rise and fall times are controlled and remain at 100 nano-seconds.

Front panel test points are provided for monitoring the input and outputs and each Pulse Distribution Amplifier has its own D. C. regulator.

The **150** utilizes the 101 frame for mounting up to 3 modules and with the 103 frame you can accommodate up to 10 modules.



MODEL 151

OPTION "A" ILLUSTRATED

FEATURES

- I.C. CIRCUITS
- PULSE WIDTH ADJUSTMENT UP TO 0.5 MICRO SEC.
- HUM UP TO 4.0 Vp-p, NO OUTPUT JITTER
- 6 OUTPUTS
- ONE DELAY ADJUST FOR 6 OUTPUTS
- OPT. 3 DELAY ADJUSTS FOR 6 OUTPUTS

DESCRIPTION

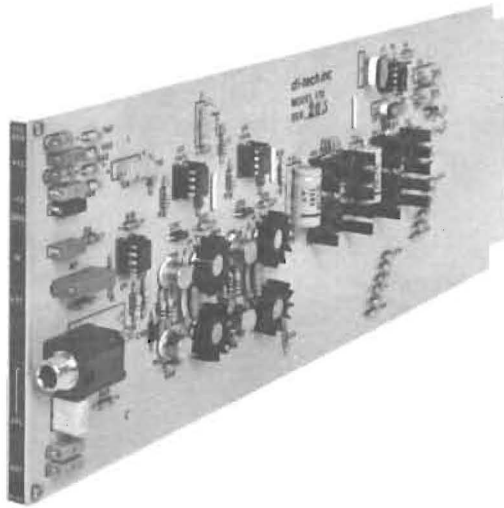
The di-tech **MODEL 151** Pulse Distribution Amplifier is identical to the Model 150 Pulse D.A. except for the added features of adjusting the pulse width and pulse delay. The standard **151** has one delay adjustment for 6 outputs and the **151** Opt. A has one adjustment per 2 outputs thereby providing 3 delay controls.

The carefully controlled passive circuit and I.C. comparator allows for stable pulse delay and avoids

problems usually encountered with one shot multi-vibrators.

Front panel test points are provided for monitoring the input and outputs and each Pulse Distribution Amplifier has it's own D.C. regulator.

The **151** utilizes the 101 frame for mounting up to 3 modules and with the 103 frame, you can accommodate up to 10 modules.



MODEL 170

KEY FEATURES

- 1 INPUT, 6 OUTPUTS
- HI-IMPEDANCE INPUT, BAL OR UNBAL
- .1% DISTORTION @ +18dBm OUTPUT
- ± 20 dB GAIN
- HEADPHONE JACK
- SCREW TYPE TERMINAL BLOCKS

DESCRIPTION

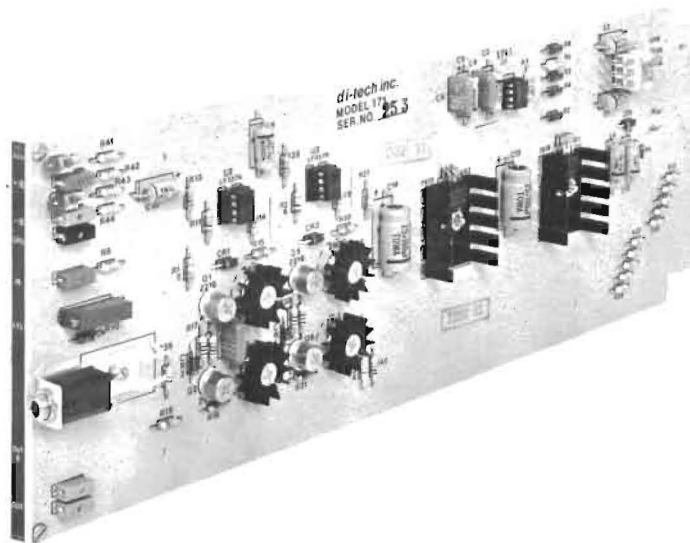
The Di-Tech **MODEL 170** audio D.A. features a 200K resistive input, balanced or unbalanced with six 600 ohm outputs. Output type is balanced, 600 ohm resistive buildout.

Maximum input level is +24dBm and maximum output level is +18dBm continuous. Distortion at these levels is 0.1% maximum. The 6 outputs are adjustable via a single control which is located on the front of the unit.

A unique feature of the **MODEL 170** is the front panel headphone jack. This jack permits a simple access to the audio D.A. for listening purposes whether it be for program identification or for trouble shooting purposes. The audio signal is not disturbed at all when utilizing the headphone set.

The audio D.A. is mounted into the Di-Tech 101 or 103 frame. The 101 accomodates 3 modules and the 103 mounts 10 modules.

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MODEL 171

KEY FEATURES

- 1 INPUT, 6 OUTPUTS
- HI-Z INPUT, BAL OR UNBAL, +24dBm LEVEL
- .1% DISTORTION @ +18dBm OUTPUT
- MAXIMUM OUTPUT LEVEL +22dBm @ 600 OHM
- BANTAM JACK, 6TH OUTPUT, UP-FRONT
- 0 TO 40dB GAIN, ADJUSTABLE 2 RANGES

DESCRIPTION

The Di-Tech **MODEL 171** audio D.A. features a 200K resistive input, balanced or unbalanced with six 600 ohm outputs. Output type is balanced, 600 ohm resistive buildout.

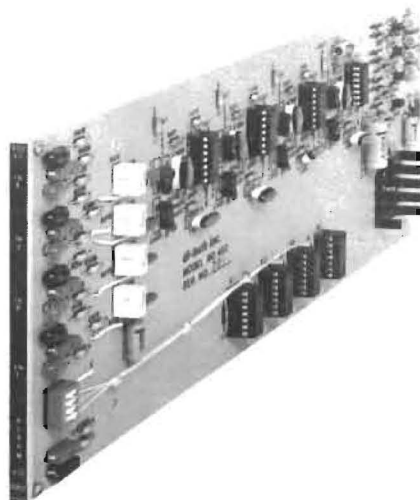
Maximum input level is +24dBm when in the 20dB gain mode. When switched to the 40dB gain mode, the maximum input level is +4dBm.

The 6th output is conveniently located on the front of the unit. This allows re-routing of the audio thru

patch cords when the need arises. The output level for all outputs are controlled by a single multi-turn potentiometer located up-front.

Each **MODEL 171** includes its own input fusing and regulators thereby limiting a fault to that one module without affecting others in the frame.

The **171** audio D.A. mounts into the Model 103 frame which is 5¼" H. and accepts up to 8 modules.



MODEL 402

KEY FEATURES

- 4 BRIDGING INPUTS PER CARD
- 12 VIDEO INPUTS PER 1 $\frac{3}{4}$ " FRAME
- 40 VIDEO INPUTS PER 5 $\frac{1}{4}$ " FRAME
- THRESHOLD CONTROL, 10 TO 40 IRE UNITS OF SYNC
- 4 ALARM SWITCHES PER CARD
- EXTERNAL ALARM OUTPUTS

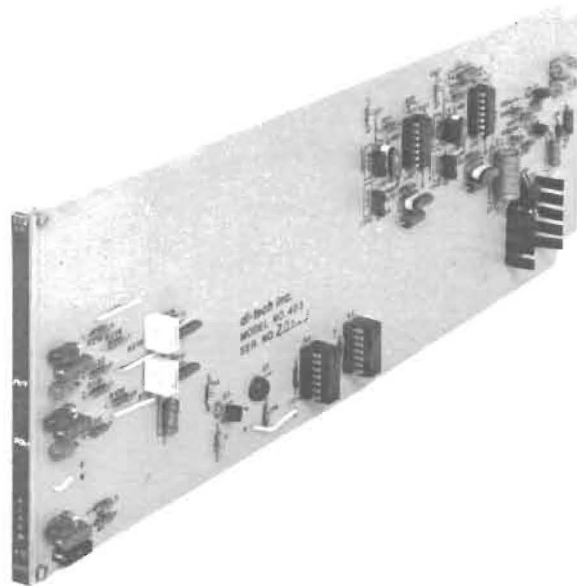
The Di-Tech Video Presence Detector utilizes a unique input circuit that is sharply tuned to pass only the horizontal line rate of the composite video input. In addition, the circuit is also level dependent thereby providing the user with a true indication of presence or absence of video.

The **MODEL 402** provides for 4 bridging loop thru inputs and 4 alarms. Each detector has its own alarm circuit, thereby permitting an individual alarm for each video input. The on-board alarm light is illuminated and separate external relay outputs are provided.

The features for the **MODEL 402** are: (1) there are 4 front panel switches which individually engage or disengage the alarm circuits. (2) an adjustment is provided for each detector in order to adjust the threshold level from 10 to 40 IRE units of sync. (3) with the 101 frame you can monitor up to 12 inputs and the 103 frame can accommodate up to 40 inputs.

The Video Presence Detector is adaptable to a wide variety of applications, such as; simultaneous monitoring of all video inputs to large A/V routing switchers, security surveillance systems, monitoring remote feeds and controlling remote equipment on/off.

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MODEL 403

FEATURES

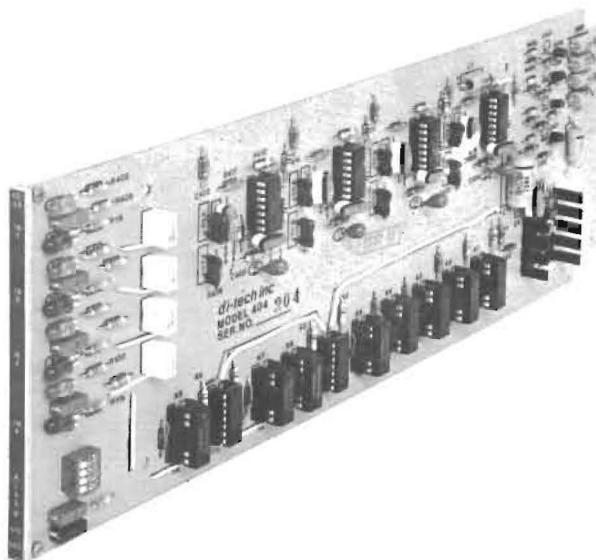
- I.C. DETECTORS
- ON-BOARD LED STATUS INDICATORS
- RELAYS FOR EXTERNAL ALARMS
- AUTOMATIC RELAY SWITCHING
- SEPARATE DETECTOR FOR AUXILIARY INPUT
- 2 FORM C CONTACTS FOR BAL. AUDIO SWITCH

DESCRIPTION

The di-tech **MODEL 403** has been designed to be utilized at remote unattended areas where automatic video and audio switching is required when a failure occurs in the transmission system.

Two inputs are provided; one is for the program and the other is for the auxiliary backup composite video feed. Should the program feed fail, the on board video detector output would then trigger the relay to automatically switch to the auxiliary input. Normally the unit is factory set to switch after a 3 second failure but this can be easily altered by a simple component change. As this switch is taking place, an on-board LED failure indicator is illuminated and a separate relay is used for the external alarm. In addition, 2 form C contacts are provided for switching balanced audio.

A unique feature of the **403** is the separate video detector and alarm circuit for the auxiliary input. This added feature now allows the user to have simultaneous status on both program and auxiliary video inputs. With the model 101 frame, you can mount up to 3 modules.



MODEL 404

FEATURES

- 4 BRIDGING INPUTS PER CARD
- 2 RELAYS PER ALARM CIRCUIT
- ONE RELAY ELECTRONICALLY LATCHED
- ADJUSTABLE TIME DELAY CONTROL
- 12 VIDEO INPUTS PER 1 $\frac{3}{4}$ " FRAME
- 40 VIDEO INPUTS PER 5 $\frac{1}{4}$ " FRAME

DESCRIPTION

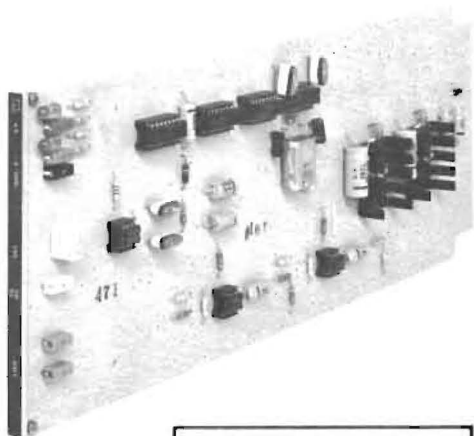
The Di-Tech **MODEL 404** video presence detector employs 4 separate sync detectors each with its associated relay alarm circuitry. The 4 inputs per card are hi-impedance bridging loop-thru.

When conditions are normal, a green on board LED is illuminated. Should a video loss occur, an on-board red LED is illuminated and 2 separate relays are provided for the external alarm. One relay is a form C type which closes or opens in a signal alarm condition. When video is present the relay automatically reverts to a normal condition. The second relay which is form A, is electronically latched and can only be reset by external control.

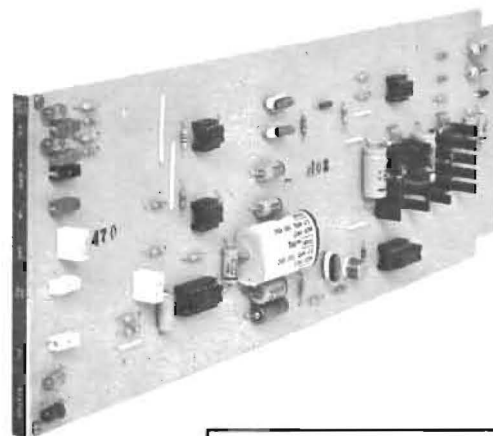
Each alarm circuit has an adjustable time delay control for establishing alarm priorities and switching logic. Delays can be set from 1 to 10 seconds.

The **MODEL 404** mounts into the 101 frame. The frame is 1 $\frac{3}{4}$ " high and accepts 3 modules. With this approach you can monitor up to 12 video lines.

For larger systems, the model 103 frame is utilized. This frame accommodates 10 modules and 40 video feeds are monitored in 5 $\frac{1}{4}$ " of rack space.



MODEL 470



MODEL 471

DESCRIPTION

The **470 tone generator** and **471 tone detector** are used to validate an audio transmission path. This path can be a twisted pair or an R.F. link. The 470 tone generator produces a sub-audible tone which is factory set in the frequency range of 20HZ to 100HZ. The frequency is then passively added to the program line and the output level is adjustable from -20 to -30 dBm. At the other end of the transmission path the 471 phase lock loop detector simply looks for the presence of the low frequency. Should a fault occur in the transmission path the detector will provide an on board LED failure light as well as a form A relay closure for driving an external alarm.

In addition to monitoring audio links, the 470/471 system can be utilized for other purposes, such as, controlling remote functions at unattended sites. The alarm relay on the 470 detector in this example is used as a control relay instead of an alarm relay. By merely turning the 471 tone generator on or off the system then performs as a remote controlled device.

The 470 and 471 can be mounted in either the 101 or 103 frame assemblies. The 101 mounts up to 3 modules horizontally and the 103 frame accepts up to 10 vertical modules plus the 801 plug-in power supply.

SPECIFICATIONS

TONE FREQUENCY:

20Hz to 100Hz, factory preset, crystal controlled

FREQUENCY STABILITY:

±.005%

470 OUTPUT IMPEDANCE:

Balanced, 40K source impedance

471 INPUT IMPEDANCE:

Balanced, 100K

MAX. PROGRAM LEVEL:

+24dBm

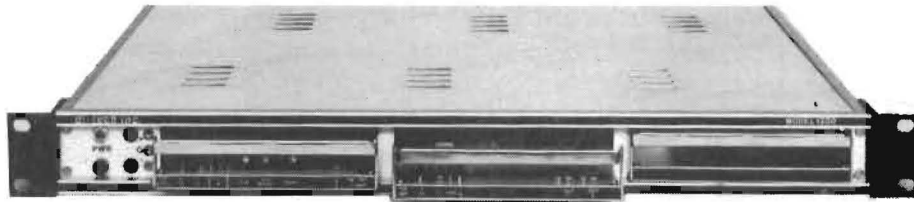
RELAY OUTPUT:

10V.A. max, 100V. max, .25A. max

D.C. INPUT:

±10 to 25 VDC

MODEL 1200



KEY FEATURES

- SWITCHABLE 75/124 OHM INPUT
- FLAT GAIN, 12dB
- ADJ. EQUALIZATION UP TO 10dB
- PLUG-IN MODULES
- 2/75 OHM AND 1/124 OHM OUTPUTS
- BACK PORCH CLAMP, FAST OR SLOW

DESCRIPTION

The Model 1200 is a versatile unit that eliminates many problems caused by lengthy 75 ohm or 124 ohm cable runs. The backporch switchable clamper attenuates hum and field tilt by at least 30dB. The differential input reduces common mode hum caused by ground loops by at least 55dB. In applications where microwave ringing occurs, the unit is easily converted over to a SOFT clamping action via a strap that is conveniently located on the Model 120 plug-in module.

The six section slope equalizer is continuously variable from 0 to 10 dB @ 4.5MHz or 10.0MHz with a single front panel control. The equalizer is

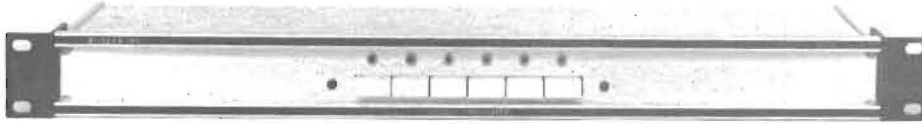
switchable between 75 ohms and 124 ohms and the location of the slide switch is on the rear panel. Post or pre-equalization is easily accomplished with the Model 1200.

The flat gain range of the unit is -6 to +12dB and the control is continuously adjustable. This control is located on the front edge of the module.

The 1200 is normally supplied to function with a nominal input of 115VAC. Should the need arise for DC operation, this unit can be furnished to operate at ± 24 or ± 48 VDC. DC operation is an optional feature.

MODEL 5106

MODEL 5112



KEY FEATURES

■ **FRONT PANEL VIDEO TEST POINTS**

■ **CROSSTALK-70db minimum.**

DESCRIPTION

The model 5106 GAP video switcher has been designed for applications where low cost switching is required, such as; test signal selection, monitor input selection and closed circuit distribution.

The 5106 is provided in a 6 x 1 configuration and utilizes high quality switches with silver plated contacts. The selected input is fed to the output and other inputs are automatically terminated.

Test points are provided on the front panel for purposes of verifying the video inputs and levels.

SPECIFICATIONS

ELECTRICAL

Input impedance • 75ohms $\pm 1\%$.

Crosstalk • -70db minimum @ 5MHz.

Transfer characteristics • No degradation due to passive nature.

Outputs • 1, equal to source impedance.

MECHANICAL

Size: 1 $\frac{3}{4}$ "H. (44mm), 19"W. (483mm), 5"D. (127mm).

Mounting: Standard E.I.A., 19" rack mount, 1 RU.

Weight: 4 lbs. (2Kg).

Connectors: BNC female

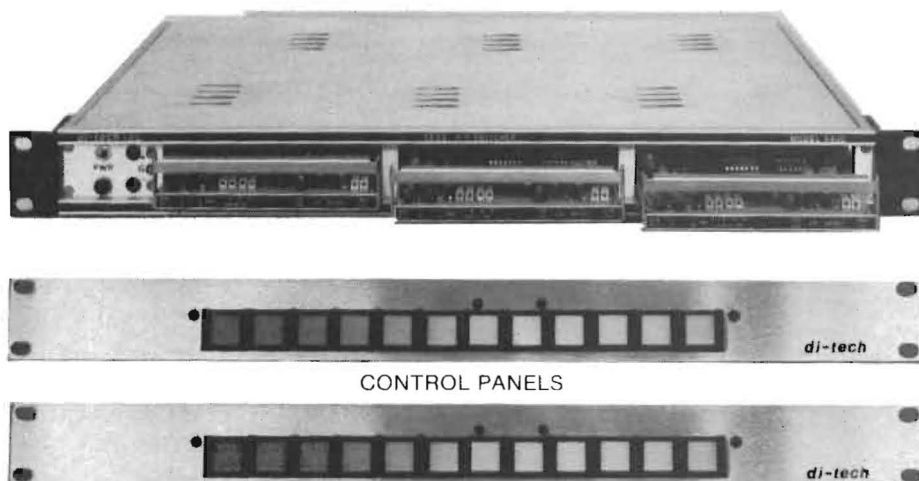
ORDERING INFORMATION

Model 5106 for 6 Inputs

Model 5112 for 12 Inputs

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MODEL 5400



KEY FEATURES

- SOLID STATE SWITCHING, AUDIO AND VIDEO
- MATRIX SIZE: 12x2, 8x2 or 4x1
- VERTICAL INTERNAL SWITCHING
- 20 MHZ BANDWIDTH
- OPTIONAL RELAY OUTPUTS
- REMOTE CONTROL FLEXIBILITY

DESCRIPTION

The DI-TECH Model 5400 remote controlled audio follow video routing switcher has been designed to offer the user a quality distribution system at an economical price.

The electronics is housed in a 1.75 inch frame or 5.25 inch frame and a choice of matrix size is provided, they are; 12x2, 8x2 or 4x1. Video switching is vertical interval and in the absence of vertical drive, switching reverts automatically to random.

Video inputs are bridging loop thru, high impedance. Output expansion is easily accomplished by looping thru the inputs until the desired output number is achieved. Typically, you

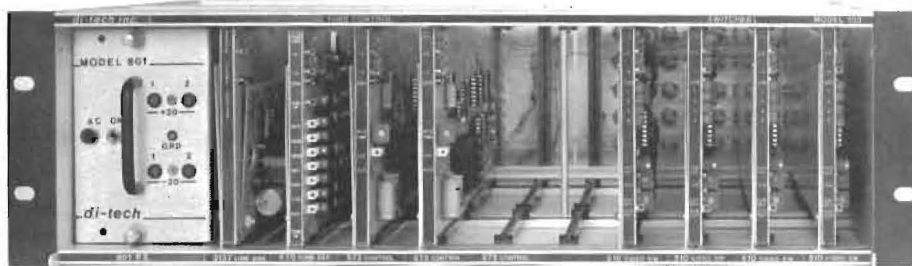
can expand the output configuration up to 12 before requiring video DA's.

The Model 504 plug-in P.C. switching card contains all the electronic circuits for the video, audio, control, latching and optional tally. The Model 101 frame is pre-wired at the factory for a 12x2 configuration, thereby permitting a truly simple input expansion by purchasing just the 504 switching card.

Variations in methods of control are available and they are; Illuminated momentary pushbuttons, thumbwheel and take button with or without readout or touch tone®. For touch tone® control see DI-TECH data sheet Model 5700.

MODEL 5470

4x4 SYSTEM ILLUSTRATED



KEY FEATURES

- TOUCH TONE CONTROL
- AUDIO, VIDEO OR AUDIO/VIDEO SWITCHING
- DIAL UP OR DEDICATED TONE ACCESS
- CONTROL UP TO A 4x4 MATRIX IN 5 1/4" OF RACK SPACE
- LED CROSSPOINT STATUS
- OPTIONAL RELAY OUTPUT CONTROL CARD

DESCRIPTION

The model 5470 system has been designed to simplify and minimize installation time of tone accessed switching equipment at remote unattended sites.

This system includes all the necessary circuitry to control four independent 4x1 switching matrixes. The 4x1 matrixes are easily converted to a 4x4 matrix by externally adding looping cables on the inputs.

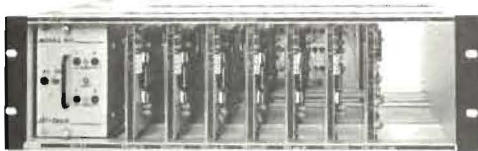
The 5470 consists of the model 3137A auto answer card along with a compression amplifier which compensates for variations in line levels. The model 570 decoder, decodes the two frequencies associated with each number on the touch tone encoder. The

model 572 control decoder accepts the output from the decoder and produces 12 high current PNP outputs which are then utilized for controlling the switching matrix on the 504 card. The switching card does contain its own latching circuitry.

The rear panel assembly is wired to accept an optional model 573 control card. This card is utilized for other control functions and is supplied with 12 momentary or latching relays.

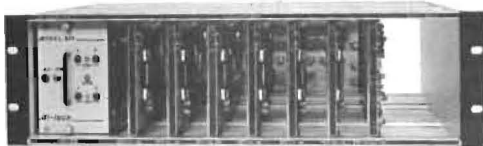
Should an A.C. power failure occur at the unattended site, the system is designated to accept and diode switch to an external D.C. source.

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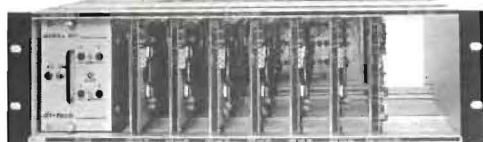
AUDIO FOLLOW VIDEO

MODEL 5500



VIDEO ONLY

MODEL 5501



AUDIO ONLY

MODEL 5502

(ALL ILLUSTRATIONS 24 X 2)

FEATURES

- UP TO 28 INPUTS BY 2 OUTPUTS PER FRAME
- VERTICAL INTERVAL SWITCHING (STD.)
- SOLID STATE SWITCHING, AUDIO AND VIDEO
- REMOTE CONTROL FLEXIBILITY
- LOOP THRU INPUTS
- PLUG-IN P.C. CARDS

DESCRIPTION

The Di-Tech series 5500, 5501 and 5502 Routing Switchers provide a compact approach to a simple and quick means of routing any input signal to any output buss without disturbing other inputs.

The standard control panels which house the momentary illuminated pushbuttons are located separately from the electronics. Should other means of addressing the switcher be required, you may utilize thumbwheel switches with readouts or Touch Tone® control (see Di-Tech Model 5700).

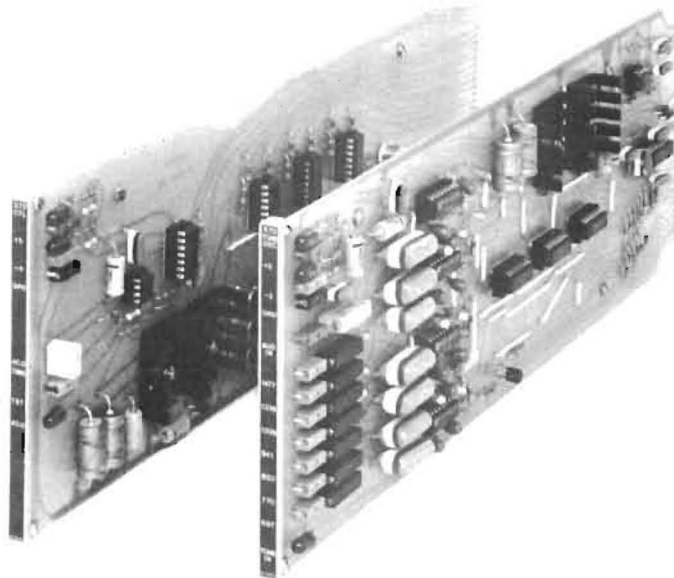
Inputs to the switcher are in groups of four and BNC type connectors are used for all inputs and outputs. Inputs are Hi-impedance, bridging and output expansion is easily accomplished by the loop thru

method. The switching pulse for video is Vertical Interval. This feature is standard with the models 5500 and 5501.

The audio switcher model 5502 employs screw type terminal blocks for all inputs and outputs. Switching is solid state and is accomplished by integrated circuits. Crosstalk is at least -65db and maximum output level is +18dbm.

An optional feature for the models 5500, 5501 and 5502 is the tally relay. Each time a crosspoint is taken a relay closure is provided for applications such as, camera tally, machine control or other control functions.

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MODEL 572

MODEL 570

MODEL 5700

KEY FEATURES

- CONTROLS 12 TO 144 FUNCTIONS
- PHASE LOCK LOOP CIRCUITRY
- CMOS I.C.'S
- HIGH CURRENT OR RELAY OUTPUTS
- STABILITY $\pm 1\%$, FO
- BANDWIDTH $\pm 5\%$, FO

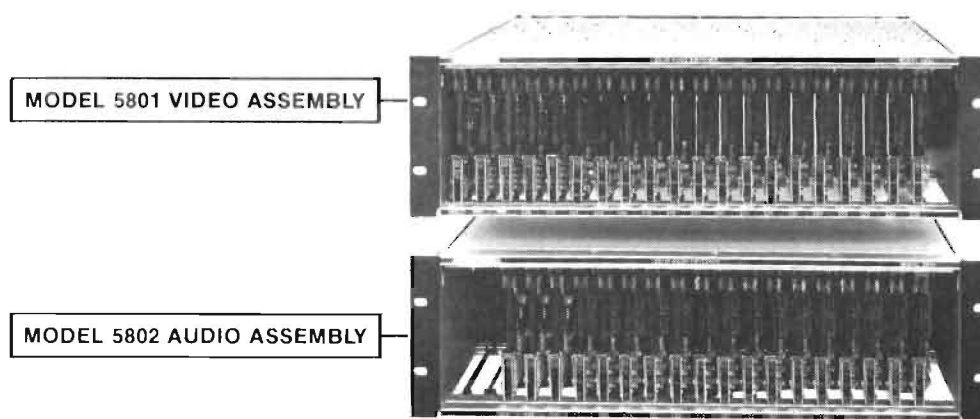
DESCRIPTION

The Model 5700 series Touch Tone® Control System is designed for applications in controlling A/V routing switchers, pan and tilt functions for remote cameras, supervisory control systems, or any communication environment that requires control through use of the telephone lines, utilizing touch tone pads.

With this system, DI-TECH provides all the necessary functional p.c. cards with power supplies and frames to satisfy most requirements, thereby virtually eliminating the usual interface problems.

For example, the Model 570 Tone Decoder utilizes phase lock loop circuitry to detect the tones and CMOS I.C.'s to decode 2 of 7 tone frequencies into 12 low level outputs. Should high level outputs be required, you would then add the Model 572 Control Decoder Card which provides for strobe gating and 12 high current open collector driver outputs. If relay outputs are required, then you utilize the Model 573. This unit is the same as the Model 572 except for the relay outputs. Should more than 12 outputs be desired, then you simply add the 572 or 573 for up to 144 outputs.

ADDRESS: 315 Wyandanch Ave., North Babylon, N.Y. 11704 • TEL. NO. (516) 643-4040



MODEL 5800 SERIES

20x15 AFV ILLUSTRATED

KEY FEATURES

- 20x15 AFV MATRIX, 10½" RACK SPACE
- 20x1 SWITCHING MODULES
- BCD PARALLEL CONTROL
- CROSSPOINT LATCH FEEDBACK TALLIES
- DIFFERENTIAL INPUT, AUDIO
- EXPANDABLE INPUTS AND OUTPUTS
- 3 LEVEL AUDIO SWITCHING, OPT.
- DC RESTORER FOR VIDEO INPUTS
- LED READOUTS, CROSSPOINTS STATUS, OPT.
- AUDIO BREAKAWAY, OPT.

DESCRIPTION

The **5800 series AFV routing switcher** employs separate frames to house the video and audio modules. A building-block approach is utilized in order to simply expand the inputs or outputs as future requirements change. Non-proprietary multi-source components are used throughout and there are no specialized single source items utilized in the system.

The audio and video switching modules contain 20 x 1 matrices complete with output amplifiers. When the switching module is extracted from the frame you only effect those inputs to that one output buss. Other output busses are not effected. The video and audio matrix frames are arranged in a 20 input by 15 output format. Each frame occupies 5¼ inches of rack space so for a 20 x 15 AFV matrix you only require 10½ inches of rack space. Each 20 x 1 video switching module contains an LED

numerical readout for crosspoint status. This is in addition to the tally feedback indicator on the control panel.

Control input and crosspoint tally return are in a bi-directional BCD format, therefore only eleven wires are required for the control cable. The basic capacity is 100 inputs and expansion beyond that requires additional control facilities. Various methods of control are (I) illuminated momentary pushbuttons (II) thumbwheel with take button and tally indicator (III) touch pad with preset and on-air indicators (IV) external computer or controller.

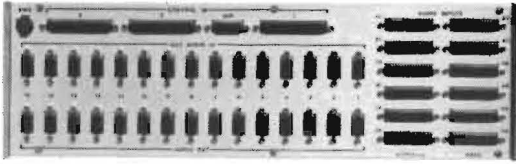
External power supplies are furnished with the system. The rack space for the supplies vary, depending on the matrix ordered. Dual power supplies and battery back-up systems for crosspoint memory are available as an option.

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5800 SERIES CONTINUED

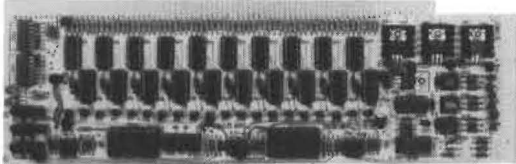
Model 5802 Audio Frame Assembly

The frame is 5¼" high and accommodates all the audiomodules for a 20 x 15 matrix. A hinged down front panel is provided for easy access to the vertically mounted plug-in modules. All matrix frames are provided with connector facilities which enable field expansion to be carried out in a simple and quick fashion. Control and signal loop through connectors are also provided.



Model 525 Audio Matrix Board

This board is arranged in a 20 input by 1 output format and an I.C. is used for the crosspoint. Switching for three separate audio channels is provided and each channel has its own amplifier with a front panel control. The 525 accepts the BCD data from the 520 card, decodes it and drives the I.C. crosspoint.



Model 535 Audio Input Amplifier

The input circuitry contains a differential input and is high-impedance bridging. There are 20 amplifiers on each board and one board per audio channel is required. For three channels of audio you require three input amplifier boards. The operational amplifier employs an I.C.



TYPICAL CONTROL PANELS



Single bus control with 20 illuminated momentary pushbutton switches in 1¼" of rack space. The pushbutton cap is removable and the lens insert comes in various colors. Clear mylar inserts are used for signal identification.

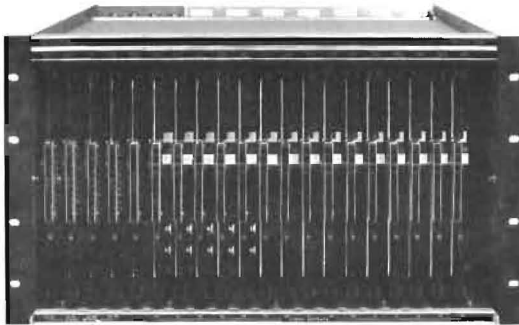


Single bus thumbwheel control panel with preset and take function. On-line tally is provided and up to 3 thumbwheel controls are mounted on a 1¼" panel.



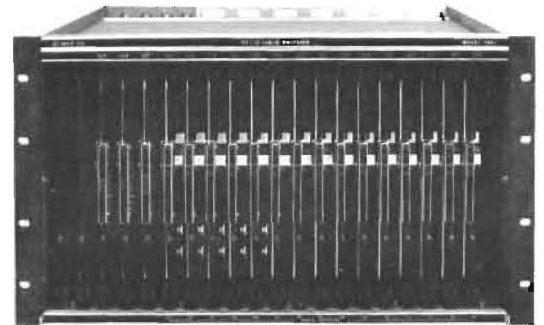
Single bus touch pad control with separate indicators for preset and on-line functions.

MODEL 5840 SERIES



MODEL 5841 VIDEO ASSEMBLY

MODEL 5840 SERIES
40x15 AFV ILLUSTRATED
WITH 3 CHANNELS OF
AUDIO PER INPUT



MODEL 5842 AUDIO ASSEMBLY

FEATURES

- Input/output expansion
- Up to 3 audio levels per input
- Audio/video breakaway
- Vertical interval switching
- Parallel or serial control
- BCD parallel input port for computer control
- 40 x 15 AFV matrix in 21" rack space
- 40 x 1 crosspoint modules

DESCRIPTION

The **5840 series routing switcher** can be supplied in various configurations such as; audio only, video only or audio follow video. The audio components are housed in the 5802 frame assembly and the video is contained in the 5801 frame assembly. When interchassis control cables are installed, the system then becomes an audio follow video switcher.

Each frame as illustrated has the capacity to house up to a 40 x 15 matrix in 10½ inches of rack space. The audio follow video version requires 21 inches. Expansion beyond the 40 inputs and outputs is achieved by adding additional frames and cabling.

The audio and video crosspoint cards are configured in a 40 x 1 format therefore, output expansion within the frame is in increments of one. There are four input amplifier boards in each video frame and each board houses ten input amplifiers. Any crosspoint card within the 5841 or 5842 frames can be extracted with power on, without affecting any other output bus in the system.

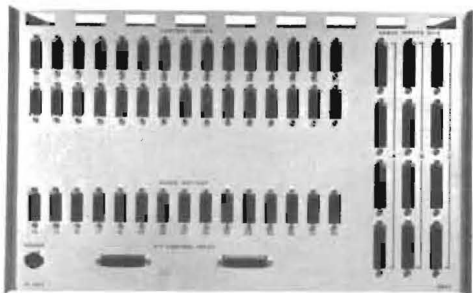
The 5840 series can be supplied with LED

numerical readouts on the 40 x 1 crosspoint modules. In addition, thumbwheels with a take button can also be added. Both of these features are available as an option.

The **5840 routing switcher** can be controlled in various ways. They are; computer, illuminated momentary pushbuttons, thumbwheel with take button and on line indicator, touch pad with preset and on-air indicators and X-Y control. Custom panels with preset, salvo, and single button take are furnished as an option.

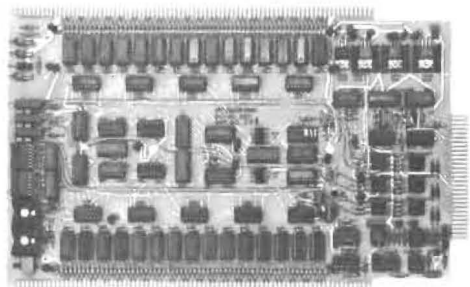
Two types of control are available with this series, and they are serial or parallel. The serial method allows you to utilize a single coax cable as the control cable. This control system permits up to 30 panels on a single loop. The parallel method of control is in a bi-directional BCD format and only 11 wires per control cable is required. The diameter of this control cable is only one-quarter of an inch.

External power supplies are utilized to furnish power to the 5840 series and a redundant system with diode switching is available as an option.



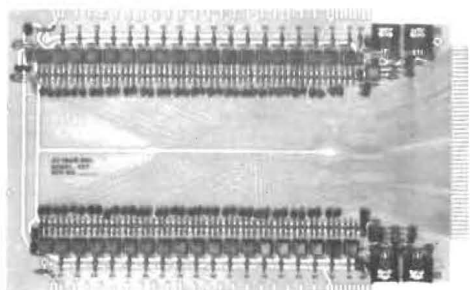
Model 5842 Audio Frame Assembly

The frame is 5¼" high and accommodates all the audiomodules for a 40 x 15 matrix. A hinged down front panel is provided for easy access to the vertically mounted plug-in modules. All matrix frames are provided with connector facilities which enable field expansion to be carried out in a simple and quick fashion. Control and signal loop through connectors are also provided.



Model 527 Audio Matrix Board

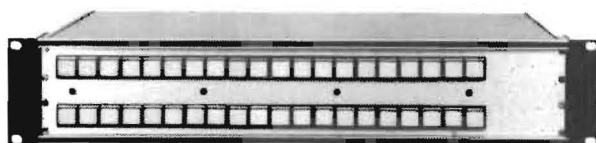
This board is arranged in a 40 input by 1 output format and an I.C. is used for the crosspoint. Switching for three separate audio channels is provided and each channel has its own amplifier with a front panel level control. The 527 also contains circuitry for its own control, latching and crosspoint tally. The control circuitry is BCD 8 bit parallel with take line. Drive levels are TTL.



Model 537 Audio Input Amplifier

The input circuitry contains a differential input and is high-impedance bridging. There are 40 amplifiers on each board and one board per audio channel is required. For three channels of audio you require three input amplifier boards. The operational amplifier employs an I.C. This board employs redundant regulators with automatic switchover.

TYPICAL CONTROL PANELS



Single bus control with 40 illuminated momentary pushbutton switches in 3½" of rack space. The pushbutton cap is removable and the lens insert comes in various colors. Clear mylar inserts are used for signal identification.



Single bus thumbwheel control panel with preset and take function. On-line tally is provided and up to 3 thumbwheel controls are mounted on a 1¾" panel.



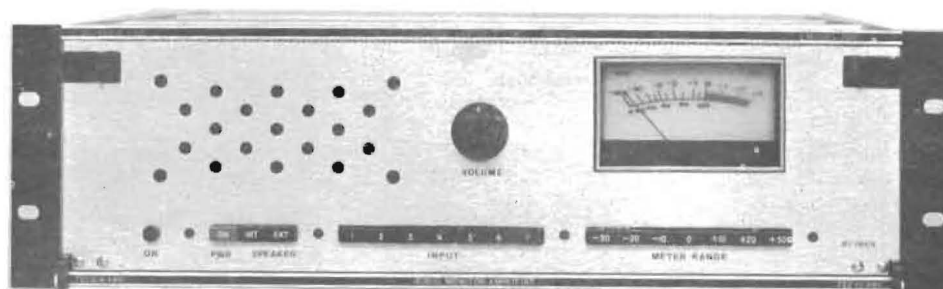
Single bus touch pad control with separate indicators for preset and on-line functions.



Single bus thumb-wheel control - desk top mount.

MODEL 7001

OPTION "A" ILLUSTRATED



KEY FEATURES

- 4 INPUTS
- INTERNAL SPEAKER
- 10 WATT AMPLIFIER
- PLUG IN P. C. CARDS
- 7 DECADES OF ATTENUATION
- 600 OHM OUTPUT

DESCRIPTION

The model 7001 audio monitor amplifier has been designed for use in TV stations, AM/FM stations, earth satellite stations and other telecommunication applications where listening, measuring, testing and switching of multiple audio inputs is required.

The VU meter amplifier card increases the audio input to a sufficient level in order to provide an input range of -30 to +30 dBm for 0 VU on the meter. This range is achieved by utilizing the 7 decades of attenuation located on the front panel. In addition, a 600 ohm auxiliary output is provided with an adjustable level from 0 to +10 dBm.

For listening purposes, a 10 watt amplifier and

internal speaker is provided. An external speaker can be utilized by simply disengaging the internal speaker via a front panel switch. The speaker output is short circuit protected.

The Tone Generator card (option B) provides a switchable CW or program tone burst in the frequency range of 300 Hz to 15 KHz. Output level is adjustable from 0 to +10 dBm. The oscillator is factory set to generate a frequency of 1 KHz but this can be readily changed in the field by an on-board potentiometer.

The mechanical design of the model 7001 permits easy access to the plug-in P.C. cards via the hinged down front panel.

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MODEL	DESCRIPTION	PRICE
110	Video D.A., 1 x 6, D.C. coupled outputs A.C. coupled outputs	240.00 250.00
111	Video D.A., 1 x 6, Diff. input, D.C. coupled outputs A.C. coupled outputs	265.00 275.00
120	Video D.A., 1 x 6, w/differential input & clamper Option A - Model 120 w/10dB cable equalizer	325.00 370.00
150	Pulse D.A., 1 x 6	225.00
151	Pulse D.A., w/variable delay. 1 adjustment per 6 outputs Option A - Model 151 w/3 adjustments, 1 adj. per 2 outputs	270.00 325.00
170	Audio D.A., 1 x 6 w/+18dBm output	210.00
171	Audio D.A., 1 x 6 w/+22dBm output	265.00
402	Video Presence Detector, 4 inputs, 4 alarm relays	285.00
403	Video Presence Detector, 2 inputs, relay switching	260.00
404	Video Presence Detector, 4 inputs, 2 alarm relay per input	450.00
411	Video Presence Detector, w/numerical character generator ...	395.00
412	Video Source Identifier, 4 digits	275.00
504	4 x 1 Audio/Video switcher plug-in card	410.00
1200	75/124 OHM, Clamper, Amplifier, and Equalizer	925.00
5106	6 x 1 Passive Video Switcher, non-illuminated buttons	175.00
5112	12 x 1 Passive Video Switcher, non-illuminated buttons	235.00
5400	AFV, remote controlled routing switcher w/VI switching: Matrix, 12 x 2 Matrix, 8 x 2 Matrix, 4 x 1 Note: Price includes 1 3/4 control panels with momentary illuminated pushbuttons, V.I. switching and 50 ft. control cables. Options: A. Tally relays, add \$245 for 12 in, \$175 for 8 in, \$105 for 4 in. B. Control cables, extra lengths add .60 per ft. C. Touchtone control.....price on request. D. BNC looping coax cables (8279) 6" length at \$9.00 each. E. Audio input/output cable (10 feet) with mating connector. The opposite end is pigtailed. 1 per frame at \$70.00	2,365.00 1,955.00 1,325.00
5470	Telephone Tone Accessed switching system: 4 x 4 Video only Matrix 4 x 4 Audio follow video Matrix Option A -----Battery back-up system Note: Larger Matrices Available-----price on request	3,220.00 3,530.00 295.00